



## Sandhills Refuge News



### IN THIS ISSUE....

#### *A day in the life of...*

Nancy Jordan, Refuge Biologist

#### *A Moment with the Manager....*

Fifty Shades of Green

#### *Birds Eye View...*

Mac Williams

#### *Calendar of Events*

#### *Conservation Cooperation...*

Meet Charles Babb,  
Coordinator, SLPCP

#### *Friends Focus*

Kay McCutcheon

#### *In case you wondered....*

The forest needs fire?

#### *Wildlife Workers...*

Refuge Volunteers & the SCWF

#### *Will's Wildflower Spotlight...*

April

*Do you have a topic of interest or a question for refuge staff? Please submit your questions to our email address ([CarolinaSandhills@fws.gov](mailto:CarolinaSandhills@fws.gov)) and we may feature your idea in an upcoming newsletter. Better yet, would you like to write a column? Let us know and we let you put pen to paper!!*

### *In case you wondered...the forest needs fire?*

The refuge began its annual prescribed burning in February. As you visit the refuge over the next several weeks, you may see yellow-clad firefighters, special "off-road" fire engines, and a helicopter attending to these burns. Prescribed burning, the intentional application of fire to meet management objectives, plays an essential role in the longleaf pine-wiregrass ecosystem that dominates the refuge. Fire maintains the grassy understory preferred by many species that call the longleaf forest home, including fox squirrels, quail, wild turkeys, several species of sparrows, and the endangered red-cockaded woodpecker.

Prescribed burns are initiated from February through June. Fires that occur later in the growing season more closely mimic the natural fires sparked by lightning that historically occurred.

In addition to ecological benefits, prescribed burns reduce hazardous fuels that build up in the absence of natural fires. To prevent loss of property from a wildfire, prescribed fire is an effective habitat management tool to eliminate woody fuel build-up. In fact, since the refuge began using prescribed fire, only a few wildfires have occurred despite the area having one of the highest lightening strike occurrences in South Carolina. Wildfires that have occurred have been contained to a minimum size and controlled without significant damages to neighboring lands, both testaments to the success of the refuge's prescribed fire program.

Refuge biologists work closely with fire personnel to develop a plan that will benefit wildlife and promote the habitat needs of endangered species and other wildlife. Many visitors are understandably concerned when they visit the refuge and see a charred landscape. Others are concerned for ground-nesting birds that may be impacted by burns conducted in April and May. Areas that have been burned typically begin to green-up within three weeks of the application of fire. By the end of the growing season, a lush understory of grasses, wildflowers, and legumes has formed. According to research, only a few ground nesting birds may be impacted by the application of late spring prescribed burns. The ecological benefits far outweigh the temporary losses that occur.

Fire Management personnel closely monitor weather and fuel conditions to maximize results and minimize smoke impacts on adjacent communities. However, some highways may be impacted by smoke for short periods. For more information or to discuss this management activity, please contact the Refuge at 843/335-8350 or [carolinasandhills@fws.gov](mailto:carolinasandhills@fws.gov).

## Friends Focus

As we begin a new year, it is my hope that the Friends of Carolina Sandhills National Wildlife Refuge can find ways to re-invigorate our Friends and Volunteers for the tasks that lie ahead for us. From everything we're hearing and seeing in the news, the next few years could be a little uncertain for natural resource agencies at all levels. There could be many challenges

and obstacles to get past and it is vitally important that support groups such as ours are prepared for the task. Here are a few things that come to mind that may help us become better equipped:



Increase our membership. Memberships and renewals run from January 1 through December 31<sup>st</sup> each year. If you haven't renewed, please do. If you know someone who should join, recruit them.



Energize our membership. One great way to do this is to spend more time on the refuge. It's pretty hard to promote the refuge if we don't know it. I have been a bit disappointed that we've had lackluster attendance from our membership at some of our most recent events. I realize that many of us lead extremely busy lives, but let's make an effort to support activities that promote and support the refuge's resource conservation efforts.



Encourage your friends, family, neighbors, and associates to visit the refuge and take advantage of outdoor recreation opportunities available to them. And while you're at it, post some pictures and comments on Facebook, Twitter, Instagram, etc.



Remind ourselves of our purpose and what we do – the Friends of Carolina Sandhills Refuge is an organization composed of citizens who treasure the dynamic longleaf pine ecosystem found here. This group is dedicated to supporting the role of the Carolina Sandhills NWR in its work to protect and preserve the longleaf/wiregrass ecosystem for the benefit of the public and the forest community. We seek to accomplish this by: promoting the enjoyment and responsible use of the refuge by the public; fostering a better awareness and appreciation of the present value and historical significance of the longleaf/wiregrass ecosystem; engaging in educational, scientific, and civic activities to assist and promote the NWR; and by upholding the stewardship of the NWR system.



Be informed. Take the time to research natural resource issues, especially when it concerns pending legislation introduced in national, state and local arenas that could impact natural resources and the refuge's and other natural resource conservation agencies and organizations' ability to properly sustain these precious resources. Make your concerns known – contact your local, state and national representatives.



Volunteer, participate, encourage the refuge staff, learn more about the longleaf pine ecosystem, and support our partner organizations with similar goals (i.e. the Longleaf Alliance, the SC Wildlife Federation, the Sierra Club, etc.).

We hope to see you on Carolina Sandhills Refuge soon. Let's you and I do our part to make 2017 a great year for natural resource conservation!

Kay McCutcheon  
President  
Friends of Carolina Sandhills Refuge

***The Friends of Carolina Sandhills NWR is a group of citizens dedicated to supporting the role of the refuge in protecting and preserving the longleaf-wiregrass ecosystem; promoting the enjoyment and responsible use of the refuge by the public; and engaging in educational and civic activities to promote the refuge and wise stewardship of its resources. JOIN TODAY!!***

### Calendar of Events

Friends Board Meeting. Join SCDNR Biologist Alix Pedraza as she discusses developing a natural resources outreach program for Hispanic audiences. Refuge Conference Room, 23734 US HWY 1, McBee, SC <b>FREE</b>	Thursday, March 16, 2017 6:30p.m.
Earth Day at Kalmia Gardens of Coker College, Hartsville, SC <b>FREE</b>	Saturday, April 22, 2017 9:00a.m.-2:00p.m.
Birding Boot Camp with Dr. Bill Alexander, meet at Refuge Office <b>FREE~RESERVATIONS REQUIRED 843/335-8350</b>	Saturday, April 29, 2017 8:30a.m. til Noon
Annual Youth Fishing Derby, Oxpen Youth Pond, Carolina Sandhills NWR <b>FREE~RESERVATIONS REQUIRED 843/335-8350</b>	Saturday, May 20, 2017 8:00a.m. til Noon

## Wildlife Watchers....A spotlight on Refuge Volunteers

**F**riends, volunteers, and staff of the refuge along with the SC Wildlife Federation hosted the 18<sup>th</sup> annual Working for Wildlife volunteer workday on Saturday, December 10th. The workday is an annual project of the SC Wildlife Federation. Activities included protecting red-cockaded woodpecker trees, maintaining trails, installing trail signs, constructing fish structure, kiosk cleaning, and cleaning out the refuge office flower bed. Eighteen adult volunteers and 12 youth from Cub Scout Pack 523 (Hartsville) attended the workday.

Working for Wildlife has generated more than 1600 hours in volunteers service to the refuge. Some years, we had only five or six volunteers while other years, more than 40 attended. One thing we knew we could always count on is the support of the SC Wildlife Federation. In addition to being the primary sponsor of the event, they market the event with their members and through their Master Naturalist classes. To obtain Master Naturalist certification, students must earn a certain number of conservation volunteer hours, so the Working for Wildlife is a natural fit. One of the things that I have enjoyed is getting to know the volunteers who return year after year. I look forward to spending a few hours learning from them as they have traveled throughout South Carolina exploring and volunteering in our many natural areas. If you never participated in Working for Wildlife, we hope that you will join us this year. And a very hearty thank you to the many volunteers who have served throughout the years and to the continued support of the SC Wildlife Federation.



### To become a Friend (please print)

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_

Email \_\_\_\_\_

- ☐ \$15 Individual Friend
- ☐ \$25 Family Friend
- ☐ \$250 Lifetime Friend
- ☐ I want to volunteer
- Gift Donation (Amount) \_\_\_\_\_

Corporate level memberships are available.

Friends are invited to special events at the refuge. Please visit [carolinasandhills.fws.gov](http://carolinasandhills.fws.gov) for a schedule of events and meetings.

Dues are payable annually in January. Please make checks payable to Friends of the Carolina Sandhills.

Mail form with dues to:  
Friends of the Carolina Sandhills NWR  
23734 Highway 1  
McBee, SC 29101

### Meet Charles Babb, Coordinator, Sandhills Longleaf Pine Conservation Partnership



The Chesterfield Soil and Water Conservation District (SWCD) recently announced the hiring of long time USDA employee Charles Babb. Babb had been with the Natural Resources Conservation Service for nearly 36 years and has been in Chesterfield County since 1984. The SWCD moved Babb into the vacant Sandhills Longleaf Pine Partnership Coordinator position in April 2016 after former coordinator, Jimmy Lisenby, left in January. "When Jimmy left, we were unable to fill the position with a quality candidate who would pick up where he left off," said Babb. "I was eligible to retire from the USDA and thought this would be a great opportunity to transition into." Babb is excited to be able to work in an area that he is particularly interested in - the Longleaf pine ecosystem. "When we realized that Charles was interested in the position, we breathed a sigh of relief," explained SWCD Commissioner Chairman Roger Smith. "Jimmy had brought the Partnership this far, and we were concerned that a brand new coordinator would take a while to get up to speed. We needed someone to hit the ground running from day one." And Babb has hit the ground running. After taking one day off, Babb moved his chair 20 feet to a new desk and has picked up where Lisenby left off. "The Partnership is doing great things, building on what Jimmy started," said Babb. "We are working on our fifth major grant proposal that, if funded, will allow us to continue to help Landowners interested in planting or managing longleaf pine." To contact Babb, please call 843-623-2185 x111.



## *A Moment with the Manager....Fifty Shades of Green*

Spring is a wonderful and busy time of year in the Sandhills. Hunters participate in quota turkey hunts, woodpeckers begin nesting activity, the prescribed fire season is underway, school groups participate in field trips, and organizations host tours on the refuge. The turkey oaks leaf out and the pine pollen will coat everything with a fine, yellow mist. If you will forgive my exploitation of pop culture, this juxtaposition of fifty shades of green gives the landscape an imprecise setting much like a Monet masterpiece. It is this season among all others that reminds me why I chose the Sandhills and more importantly, why the Sandhills chose me.

Throughout my career, the Sandhills have been home. First, as a graduate student, I conducted research in the Sandhills of Aiken County. Honestly, Aiken did not have the “hills” but rather gently rolling terrain and deep sands. As a forestry student, I marveled at the diversity of plants that occurred in such a xeric and seemingly sterile environment. Later, I experienced my first stint in the true sand “hills” as a biologist at the Sand Hills State Forest. It was there that I first learned that there was more to the Sandhills than longleaf pine, wiregrass, and turkey oaks. The ecosystem includes acidic bogs with pitcher plants, sundews, and Pine Barrens tree frogs; Atlantic white cedar pocosins with switch cane, titi, and ericaceous plants usually reserved for the mountains of South Carolina that are home to colorful warblers that find respite in the thick shrubs; and, rock outcroppings with creeping blueberry, pixie moss, and trailing arbutus found beneath towering longleaf pines as Bachman’s sparrows nest on stark white sandy “soils.”

As I wander the Wildlife Drive, I am reminded of the many reasons why I have the best job on earth, counting the Friends of Carolina Sandhills NWR among them! How can one be blasé when the intricacies of nature surround us and beg us to learn more? I know that you, too, appreciate the subtleties of the Sandhills. Thank you for your continued support of the Carolina Sandhills NWR. I hope that you will take advantage of the marvelous weather and explore this complex ecosystem.

Regards, Lyne Askins Refuge Manager

### *A Biologist's Day in June*

*By Nancy Jordan*

Daylight seeps in through the longleaf pine as I set my spotting scope sights on an active Red-cockaded Woodpecker (RCW) cavity tree about 300 feet away. I'm here in June before dawn to do what we call a “group status check” to observe what this RCW group or possibly single bird is doing since we haven't found a nest at this site. We'd already found nests for 136 groups out of the 148 active RCW group sites during our weekly monitoring visits we've been doing since mid-April.

At around 6:30 AM, a familiar looking head peeks out of the cavity entrance – big white cheek patch, I can see the beginning of the ladder back feathers as he/she takes a look around at the new day. The head pulls back into the cavity and within three minutes, the bird shoots out and lands on a nearby pine tree, calling several times. In the distance, I hear an RCW response and, sure enough, here comes a second RCW, flying from where the other active cavity tree is. The birds meet up, calling to each other. I watch them for over 30 minutes as they forage in the cluster area, occasionally alighting on the active cavity tree to freshen up the resin wells. I don't hear or see any other RCWs that might indicate a nest that was missed. A smile of relief lights up my face – while no nest was found, the behavior of the birds indicates they are a breeding pair that just didn't nest this year. Looking up the color band combinations I observed, I see the female was banded as a nestling just last year. This makes sense – RCWs breeding success peaks at age 4 to 5 years and it's not unusual for young females to forego nesting in their first breeding season. Of the twelve group status checks conducted in June, four of the sites were “captured” (a bird has activated a cavity in one cluster but actually belongs to the group in an adjacent cluster), three had single birds roosting there (typically a male that either lost a mate recently or is trying to attract one), and five, including the group I observed this morning, are potential breeding groups (PBGs) that simply did not nest this year. While getting up early to be in the woods before dawn is sometimes not my favorite thing to do, I forget that once I am out there. The way the dawn's light starts seeping through the trees, the start of birds singing rising to a crescendo, the smell of a new day always makes me remember that I have one of the best jobs possible. And finding another PBG that will contribute to the overall recovery of the species is icing on the cake!



## Will's WILDFLOWER SPOTLIGHT

Drive through the Carolina Sandhills NWR on Route 145, and you might assume the refuge landscape is populated with pine trees, scrubby oaks, wiregrass, and little else. Walk along Tate's Trail, walk around Pool A on the Woodlands Pond Nature Trail, or explore Lake Bee or Oxpen Lake and you will discover the refuge is home to hundreds of blossoming native plants, many unique to the Sandhills region. From tiny, bright white Pixie Moss in early March to deep blue Pine Barrens Gentians in November, each month offers something new to discover and enjoy. Cooler temperatures make April a perfect month to hike beneath the longleaf pines on the refuge. Explore a bit and you are likely to encounter 3 bright blue spring wildflowers. Like many of the native plants on the refuge, all three tend to do best in areas that have been recently burned.

Vernal Iris (*Iris verna*, right) is one of my favorite spring wildflowers and I especially love to find these small, deep blue (or violet) blossoms in recently burned tracts where they poke up through a charred forest floor. Grass-like leaves are slender and emerge after the blossom in burn years. As with other Iris varieties, each blossom has 3 petals and 3 very showy sepals. Petals, called "standards", are unmarked while sepals, called "falls", have bright orange patches, called "signals", and bright showy veins. The falls act as landing platforms for bumblebees and the veins serve as nectar guides, helping bees find the nectar reward. Blossom color varies from violet to pale blue or rarely pure white. In most years I find numbers of Vernal Iris poking up through the pine straw in the Lake Bee picnic area. Spend a few minutes and see which bee comes to visit.



Birdsfoot Violet (*Viola pedata*, left) also blooms in April and often side-by-side with Vernal Iris. As with Iris, the intensity of the blossom color will vary from patch to patch. Individual blossoms are handsome with all petals seemingly in a single plane surrounding orange-tipped stamens. This is the violet species you are most likely to encounter while hiking in longleaf areas of the refuge. Take a minute to examine the round, deeply cut leaves which give rise to the name Birdsfoot Violet. I always find this species along Tate's Trail just south of Lake 12.

Sandhills Lupine (*Lupinus diffusus*, right), a species often found on refuge roadsides and along margins of longleaf tracts, grows as single plants or in large clumps. In April this species, also known as "Sky Blue Lupine", produces stunning spires of pale blue pea-shaped flowers. Sandhills Lupine is sensitive to late frosts and the lupine display on the refuge varies from year to year. In a good year, blue lupines decorate the forest floor. *Lupinus diffusus* takes 2 years to mature and blossom. First year growth is seen in late fall and through the winter. Blossoms appear in spring of their second year. After blooming and setting seed (look for the pea pods), these second year plants will blacken and fade away.



From spring to fall, the Carolina Sandhills Wildlife Refuge is "like a box of chocolates". You just never know which native plant species will pop up next!

Will Stuart

All photographs © Will Stuart. Used with permission.



Did you know that the Friends of Carolina Sandhills NWR has a Facebook page? Follow this link and request to join to keep up with the latest refuge and Friends' group happenings. <https://www.facebook.com/groups/90645663315/>



## Birds Eye View by Mac Williams

Welcome to the longleaf pine forests of the Carolina Sandhills National Wildlife Refuge, home to the largest population of the endangered Red-Cockaded Woodpecker (RCW) in the world. If you've traveled a long way to see an RCW, you've come to the right place. When you see longleaf pine trees with white rosin and sap dripping down them and a white ring painted on them, that's a clue that there has been activity by RCWs on that tree, and when you see several trees in a group, that's likely to be a nesting site. There are several nesting sites right by the side of Wildlife Drive, and a great place to find an active RCW family right now is about 2,200 feet down Wildlife Drive from the Refuge Headquarters building on the south side of the road. There's a small road on the north side where you can park your car. Get out there, cross the road, and listen for their distinctive nasal, squeaky calls to one another. They don't sound like other woodpeckers in the forest, and despite the name, you'll almost never see the red-cockade.



Red-cockaded Woodpecker (USFWS)



Prairie Warbler (K. Adams, USFWS)

But, we've got more here at CSNWR than RCWs. The longleaf pine ecosystem and the wetlands in the Refuge sustain around 60 other species year round including Red-headed Woodpeckers, Eastern Towhees, Belted Kingfishers, Eastern Bluebirds, and Pine Warblers, all birds that nest on the Refuge. Through the years over 180 different species of birds have been reported by eBird users on the CSNWR, though the usual cast of characters hovers around 140 different species seen per year, with 145 different species reported on the Refuge during 2016.



Hooded Merganser By Ken Billington - Own work, CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=12277928>

### 2016 Audubon Christmas Bird Count

The Christmas Bird Count (CBC) was conducted on the Refuge (and on neighboring land as well) on Saturday December 17, 2016 with 12 participants who reported 81 species, including Hooded Mergansers, Northern Harriers, A Sharp-Shinned Hawk, a Virginia Rail (a CSNWR first!), an American Woodcock, 26 American Pipits, and even three American Black Ducks! It was a good year for some uncommon birds in this part of the Pee Dee. We could use more volunteers in 2017. Anyone wishing to participate in the 2017 CBC at the CSNWR should send an email to [nancy\\_jordan@fws.gov](mailto:nancy_jordan@fws.gov)

### Passage Migrants

Late April/early May treat us to fleeting glimpses of neo-tropical passage migrants in the forests of the Pee Dee. These birds are only here for about two weeks in the Spring on their way north, and again for a couple of weeks in Autumn on their way south back to the Caribbean and Central and South America. Each of them has their particular niches, so it pays to look everywhere for birds because many passage migrants are silent. But, if you pay close attention to the canopies of mature, tall trees, especially hardwoods that grow near water, like the poplars alongside of the road opposite Pool B on Wildlife Drive, you might get lucky and see the flaming orange throat of a Blackburnian Warbler on its way north to nest in the coniferous forests of places like Maine, New Brunswick, and Prince Edward Island, Canada. The last time someone reported a Blackburnian Warbler on the Refuge was April 26, 2015. Could you be next? We hope so!



Blackburnian Warbler By William H. Majoros - Own work, CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=16067205>

***Do you have a question about birds for Mac or Nancy or that may be interesting for the group? If so, e-mail your question to [CarolinaSandhills@fws.gov](mailto:CarolinaSandhills@fws.gov) and we may feature your question and our answer in the next edition of Birds Eye View.***